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WPI Acc No: 1994-032009/ 199404

XRAM Acc No: C94-014805

Hot-melt adhesive compsn for bonding biodegradable plastics - contains

high mol thermoplastic resin and tackifier, either or both contg

polylactic acid copolymer resin

Patent Assignee: MITSUI TOATSU CHEM INC (MITK) Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 5339557 A 19931221 JP 92152177 A 19920611 199404 B

Priority Applications (No Type Date): JP 92152177 A 19920611

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 5339557 A 16 C09J-167/04

Abstract (Basic): JP 5339557 A

The compsn. contains thermoplastic resin and a tackifier, one or both of them contg. poly-lactic acid or lactic acid copolymer resin derived from lactic acid and other hydroxycarboxylic acids. The system has a melt viscosity of 10 to 300,000 cps. at 180 to 210 deg.C. A part or whole of the thermoplastic resin and/or tackifier is L type and/or D type poly-lactic acid or lactic acid copolymer resin derived from L type and/or D type lactic acid and other hydroxycarboxylic acids. The thermoplastic resin is one of or a mixt. of two or more of high molecular modified poly-lactic acid having a molecular wt. of higher than 10,000 on average selected from (a) urethanated poly-lactic acid, (b) esterified poly-lactic acid, (c) epoxy-modified poly-lactic acid, (d) urethanated modified poly-lactic acid, (e) silylated poly-lactic acid and (f) terminal esterified poly-lactic acid. The tackifier is one or more of low molecular poly-lactic acid having a mol. lower than 5,000 on average selected from (a) to (f). Other thermoplastic resins are polyamide, polyester, polyester-urethane, polycarbonate and polyolefin and other tackifiers are rosin ester and terpene-phenol resin. At least one wax component selected from natural wax, ester-amide wax and polyester wax and/or compatibilising plasticiser for poly-lactic acid is added to the compsn. in amt. 0.1 to 50 wt.%.

ADVANTAGE - The hot-melt adhesive compsn. is degraded by alkali water and microorganisms. Suitable for bonding of biodegradable plastics.

(Dwq.0/0)

Title Terms: ADHESIVE; COMPOSITION; BOND; BIODEGRADABLE; PLASTICS; CONTAIN; HIGH; MOLECULAR; THERMOPLASTIC; RESIN; TACKIFIER; CONTAIN; POLY; LACTIC;

ACID: COPOLYMER; RESIN

Derwent Class: A17; A23; A81; G03

International Patent Class (Main): C09J-167/04

International Patent Class (Additional): C09J-163/00; C09J-175/04

File Segment: CPI

Manual Codes (CPI/A-N): A05-E02; A08-M05; A09-A07; A12-A05E; G03-B02E3 Plasdoc Codes (KS): 0004 0012 0034 0037 0149 0152 0155 0202 0218 0220 0222 0224 0226 0231 0232 0233 1283 1288 1291 1292 1296 1311 1838 1840 1985

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